

# Vladimir Gudkov

## List of Publications by Year in descending order

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57  
papers

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58  
all docs

58  
docs citations

58  
times ranked

116  
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetoacoustic Polarization Phenomena in Solids. , 2000, , .		30
2	Sub-lattice of Jahn-Teller centers in hexaferrite crystal. Scientific Reports, 2020, 10, 7076.	3.3	24
3	Low temperature ultrasonic investigation of ZnSe crystals doped with Ni. Physica Status Solidi (B): Basic Research, 2005, 242, R30-R32.	1.5	20
4	Low-temperature effects of resonance electronic states at transition-element impurities in the kinetic, magnetic, and acoustic properties of semiconductors. Low Temperature Physics, 2007, 33, 207-213.	0.6	18
5	Ultrasonic evaluation of the Jahn-Teller effect parameters. Application to ZnSe:Cr <sup>2+</sup> . Journal of Physics Condensed Matter, 2011, 23, 115401.	1.8	18
6	Relaxation in ZnSe:Cr <sup>2+</sup> investigated with longitudinal ultrasonic waves. Physical Review B, 2006, 73, .	3.2	17
7	Low temperature phase transition in ZnSe doped with nickel. Solid State Communications, 2004, 129, 507-510.	1.9	15
8	Lattice instability in ZnSe:Ni crystal. Journal of Electronic Materials, 2004, 33, 815-818.	2.2	14
9	Ultrasonic investigation of the Jahn-Teller effect in ZnSe:Cr <sup>2+</sup> crystals. Physical Review B, 2008, 78, 044404.	3.2	14
10	Numerical adiabatic potentials of orthorhombic Jahn-Teller effects retrieved from ultrasound attenuation experiments. Application to the SrF <sub>2</sub> :Cr crystal. Journal of Applied Physics, 2016, 119, 225108.	2.5	14
11	Nanoscale distortions of the lattice of a ZnSe crystal doped with 3d elements. Physics of the Solid State, 2007, 49, 1235-1240.	0.6	13
12	Ultrasonic investigation of the Jahn-Teller effect in GaAs semiconductors doped by transition metals. Journal of Applied Physics, 2014, 116, 103708.	2.5	13
13	Magnetic field induced tunneling and relaxation between orthogonal configurations in solids and molecular systems. Physical Review B, 2017, 96, .	3.2	12
14	Ultrasonic Consequences of the Jahn-Teller Effect. Springer Series in Chemical Physics, 2009, , 743-766.	0.2	10
15	Ultrasonic Determination of the Jahn-Teller Effect Parameters in Impurity-Containing Crystals. Journal of Experimental and Theoretical Physics, 2019, 129, 72-80.	0.9	9
16	Magnetoacoustic oscillations in indium due to the frequency dispersion. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1993, 68, 291-303.	0.6	7
17	Ultrasonic exploration of vacancy centres with the Jahn-Teller effect. Application to the ZnSe crystal. Physica Status Solidi (B): Basic Research, 2014, 251, 1590-1595.	1.5	7
18	Ultrasonic Investigation of the Jahn-Teller Effect in ZnSe and ZnTe Crystals Doped with 3d Ions. Journal of the Korean Physical Society, 2008, 53, 63-66.	0.7	7

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19	Absorption and phase velocity dispersion of circularly polarised ultrasonics under dopplerson-phonon resonance in tungsten. <i>Journal of Physics F: Metal Physics</i> , 1986, 16, 739-753.	1.6	6
20	Ultrasonic investigation of a phase transition in ZnSe:Ni. <i>Low Temperature Physics</i> , 2004, 30, 912-915.	0.6	6
21	Ultrasonic investigations of the Jahn-Teller effect in a ZnSe:Fe <sup>2+</sup> crystal. <i>Low Temperature Physics</i> , 2009, 35, 76-78.	0.6	6
22	Acoustic Properties of Crystals with Jahn-Teller Impurities: Elastic Moduli and Relaxation Time. Application to SrF <sub>2</sub> :Cr <sup>2+</sup> . <i>Journal of the Physical Society of Japan</i> , 2017, 86, 114604.	1.6	6
23	Magnetoacoustic oscillations of ellipticity in indium. <i>Philosophical Magazine Letters</i> , 1992, 65, 267-271.	1.2	5
24	Magnetoacoustic Investigation of the Jahn-Teller Effect in Chromium Doped ZnSe Crystal. <i>Solid State Phenomena</i> , 0, 190, 707-710.	0.3	5
25	Anomalous Behavior of the Elastic and Optical Properties in Bi <sub>1.5</sub> Sb <sub>0.5</sub> Te <sub>1.8</sub> Se <sub>1.2</sub> Topological Insulator Induced by Point Defects. <i>Physica Status Solidi (B): Basic Research</i> , 2018, 255, 1800264.	1.5	5
26	Tunneling Relaxation Mechanisms of the Jahn-Teller Complexes in a CaF <sub>2</sub> :Cr <sup>2+</sup> Crystal. <i>JETP Letters</i> , 2021, 113, 47-51.	1.4	5
27	Lattice instability induced by 3d impurities in a zinc selenide crystal. <i>Physics of the Solid State</i> , 2008, 50, 1766-1771.	0.6	4
28	Resonant and relaxation absorption of ultrasound by anisotropic Jahn-Teller centers in GaAs. <i>Physics of the Solid State</i> , 2012, 54, 468-477.	0.6	4
29	Ultrasonic investigation of the relaxation time and the dynamic, relaxed, and unrelaxed elastic moduli in ZnSe:Cr. <i>Low Temperature Physics</i> , 2007, 33, 197-201.	0.6	3
30	Resonant effects in the manifestation of hybridized electronic states of iron impurities in the temperature dependences of the absorption coefficient and velocity of ultrasound propagation in mercury selenide. <i>Physics of the Solid State</i> , 2007, 49, 2065-2069.	0.6	3
31	Relaxation and resonance ultrasound attenuation by Jahn-Teller centers in a GaAs:Cu crystal. <i>JETP Letters</i> , 2012, 96, 236-239.	1.4	3
32	Elastic Moduli in Cadmium Selenide Doped with Chromium. <i>Journal of Applied Mathematics and Physics</i> , 2017, 05, 26-30.	0.4	3
33	Ultrasonic Wave Field Transport by Conduction Electrons in Indium. <i>Physica Status Solidi (B): Basic Research</i> , 1984, 121, 433-440.	1.5	2
34	Giant geometric oscillations of ultrasonic absorption. <i>Physical Review B</i> , 1995, 52, 9547-9549.	3.2	2
35	Specific Features of the Absorption and Phase Velocity of Ultrasound near the Low-Temperature Phase Transition Induced by 3d Impurities in a ZnSe Crystal. <i>Physics of the Solid State</i> , 2005, 47, 1556.	0.6	2
36	Temperature anomaly of the coefficient of ultrasonic absorption by electrons of hybridized states of cobalt impurities in mercury selenide. <i>Physics of the Solid State</i> , 2015, 57, 880-885.	0.6	2

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37	Magnetic Field Induced Relaxation Attenuation of Ultrasound by Jahn-Teller Centers: Application to ZnSe:Cr <sup>2+</sup> . Applied Magnetic Resonance, 2016, 47, 685-692.	1.2	2
38	Manifestation of the Jahn-Teller effect in elastic moduli of strontium fluorite crystals doped with chromium ions. Journal of Physics: Conference Series, 2017, 833, 012003.	0.4	2
39	Determining the Parameters of the Jahn-Teller Effect in Impurity Centers from Ultrasonic Experiments: Application to the ZnSe : Ni <sup>2+</sup> Crystal. Physics of the Solid State, 2019, 61, 180-186.	0.6	2
40	Interplay Between Relaxation and Resonance in Ultrasound Attenuation by the Cubic Crystal ZnSe:Cr. Physica Status Solidi (B): Basic Research, 2019, 256, 1800635.	1.5	2
41	Manifestation of the Jahn-Teller effect subject to quadratic $T^2$ problem in ultrasonic attenuation. Case study of CaF <sub>2</sub> :Cr crystal with isovalent and aliovalent substitution. Journal of Physics Condensed Matter, 2022, 34, 225401.	1.8	2
42	A technique for measuring the ellipticity and rotation of the polarization plane of ultrasound. Journal of the Acoustical Society of America, 1998, 104, 2756-2762.	1.1	1
43	Low-temperature relaxation in the ZnSe : V <sup>2+</sup> crystal. Physics of the Solid State, 2008, 50, 1772-1775.	0.6	1
44	Giant ultrasonic attenuation in ZnSe doped with Cr and its possible application in crystal characterization. Physica Status Solidi (B): Basic Research, 2010, 247, 1393-1395.	1.5	1
45	Observation of Low-Temperature Softening of Transverse Elastic Modulus Due to Cobalt Impurities in Mercury Selenide. Journal of Low Temperature Physics, 2016, 185, 571-576.	1.4	1
46	Jahn-Teller effect problems via ultrasonic experiments. Application to the impurity crystal CdSe:Cr. Journal of Physics: Conference Series, 2018, 1148, 012008.	0.4	1
47	Magnetoacoustic Relaxation by Cr <sup>2+</sup> Jahn-Teller Centers Revealed from Elastic Moduli. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800586.	1.8	1
48	Relaxation Contribution of a System of Jahn-Teller Complexes to the Elastic Moduli of Doped Fluorites. Journal of Experimental and Theoretical Physics, 2021, 132, 790-799.	0.9	1
49	Adiabatic potential energy surface of the Jahn-Teller complexes in SrF <sub>2</sub> :Cr <sup>2+</sup> crystal. AIP Conference Proceedings, 2020, , .	0.4	1
50	Giant geometric oscillations of ultrasonic absorption. European Physical Journal D, 1996, 46, 2537-2538.	0.4	0
51	Multiple dopplerson-phonon resonances in indium. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 2690-2693.	0.8	0
52	Dispersion of dopplerson-phonon modes in strong coupling regime. Ultrasonics, 2004, 42, 199-203.	3.9	0
53	Doppler-shifted cyclotron, dopplerson-phonon, and pseudo-dopplerson-phonon resonances in indium. Ultrasonics, 2006, 44, e1405-e1409.	3.9	0
54	Temperature dependences of relaxation time, adiabatic and isothermal elastic moduli in ZnSe:Ni and ZnSe:Cr crystals obtained in an ultrasonic experiment. Ultrasonics, 2006, 44, e1411-e1414.	3.9	0

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55	The interaction of ultrasound with electrons in hybridized states of iron impurity in a mercury selenide crystal. <i>Technical Physics Letters</i> , 2007, 33, 821-824.	0.7	0
56	Adiabatic elastic moduli in ZnSe : Mn <sup>2+</sup> and ZnSe : V <sup>2+</sup> crystals. <i>Physics of the Solid State</i> , 2008, 50, 1776-1778.	0.6	0
57	Jahn-Teller Cr <sup>2+</sup> Centers in a CdSe Crystal. <i>Physics of the Solid State</i> , 2020, 62, 2101-2104.	0.6	0